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EXAMINER	
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ART UNIT	**PAPER NUMBER**
2837	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,372	GREGORI, ERIC	
	Examiner	Art Unit	
	Antony M. Paul	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on ______.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) ______ is/are withdrawn from consideration.

5)☒ Claim(s) *31-40* is/are allowed.

6)☒ Claim(s) *1-24,28,29 and 41-44* is/are rejected.

7)☒ Claim(s) *25-27 and 30* is/are objected to.

8)☐ Claim(s) ______ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on ______ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. ______.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ______.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. ______.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: ______.

DETAILED ACTION

Claim Objections

1. Claim 23 is objected to because of the following informalities: In regard to claim 23, the phrase "The method of claim 20 further comprising not defining a count zone that includes the first subsequent passpoint event" have a negative limitation. "Applicant should claim what the claim does and not what it does not". Appropriate correction is required.

Claim Rejections – 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-22, 23, 24, 28, 29, 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Richmond et al. (5,729,101).

In regard to claim 1, Richmond et al. discloses in fig.1 a movable barrier operator (gate operator A, column 9, line 52) comprising:

- A movable barrier movement sensor 57 (fig.3, Hall effect sensor, column 10, lines 24-26)
- A counter 86 (fig.10, column 10, lines 29-31, 54-55, 60-66) that is responsive to the movable barrier movement sensor 57

- A passpoint signal generator 84 (fig.10) that is responsive (generates counts, column 10, line 55) to movement of the movable barrier (gate G, fig.1) and that generates a passpoint event (generates counts (column 10, lines 54-55) to generate a passpoint event such as gate G moving from an opened position to a coasting position see, fig.7)
- A movable barrier position determiner 64 (a microprocessor control unit, fig.10) that is responsive to the counter 86 and the passpoint signal generator 84 (column 10, lines 42-55, column 14, lines 16-22) and which correlates (movement of gate [A] in fig.1 is linked to the counts generated (column 10, lines 54-55)) a count (count of 485, fig.7) of the counter 86 with the passpoint event (gate G moving from an opened position to a coasting position see, fig.7) and further comprising a self-healing mode of operation that facilitates proper passpoint usage even when an installation sequence for the movable barrier operator has not been properly followed (The self-healing mode of operation is inherent in a microprocessor control unit 64 in the movable barrier operator A (fig.1, fig.10). If an installation sequence for the movable barrier operator is not followed, for example, a gate G in fig.8 can slam into a wall. To avoid such discrepancies the control unit [64] in the gate operator [A] can automatically calibrate and automatically adds or subtracts counts (column 12, lines 22-46 & column 14, lines 4-6)

In regard to claim 2, Richmond et al. shows in figs.1, 3 & 4 a movable barrier operator [A], wherein the movable barrier movement sensor 57 (column 10, lines 24-26) comprises a rotational sensor (column 10, lines 16-22, column 14, lines 24-25, 30-31).

In regard to claim 3, Richmond et al. shows in fig.3 wherein the movable barrier movement sensor 57 (column 10, lines 24-26) comprises a linear sensor (The linearity is inherent in a Hall effect sensor because the sensors [57] shown in fig.3 rotates in direct proportion to the movement of the gate (column 6, lines 34-43, column 10, lines 16-26).

In regard to claim 4, Richmond et al. disclose in fig.1, a movable barrier operator [A] wherein the self-healing mode of operation (see explanation in claim 1) comprises defining at least one zone (such as a count zone from 0 to 500, see fig.7) of movable barrier movement sensor signals (sensors 57 in fig.3, column 6, lines 34-43).

In regard to claim 5, Richmond et al. disclose in fig.1, a movable barrier operator [A] wherein the self-healing mode of operation (see explanation in claim 1) comprises defining the zone (such as a count zone from 0 to 500, see fig.7) as comprising a predetermined number (column 14, lines 4 –6, 9-15) of the movable barrier movement sensor signals (sensors 57 in fig.3, column 6, lines 34-43).

In regard to claim 6, Richmond et al. disclose in fig.1, a movable barrier operator [A] wherein the self-healing mode of operation (see explanation in claim 1) further comprises using at least one zone (such as a count zone from 0 to 500, see fig.7) along with the counter 86 and a passpoint signal generator 84 (fig.10, counts generated, column 10, lines 54-55) to calibrate an output of the counter 86 (fig.10 shows a counter

[86] connected to a control unit [64] which calibrate, see column 6, lines 10-13, column 12, lines 39-46, column 14, lines 4-6) with respect to a passpoint (fig.7, gate "G" moving from a fully opened position to a coasting position) as provided by the passpoint signal generator 84.

In regard to claim 7, Richmond et al. disclose in fig.1, a movable barrier operator [A] wherein the self-healing mode of operation (see explanation in claim 1) further comprises define at least one additional zone (fig.8, shows an additional count zone of 497 counts) of movable barrier movement sensor signals (pulses from sensors 57 in fig.3, column 6, lines 34-43).

In regard to claim 8, Richmond et al. teach using fig.6 a method comprising:

- Initiating movement of an object toward a position (column 10, lines 60-62)
- Processing a count as a function, at least in part, of the movement of the object towards the position, (a count of 500 is processed as a function such as equivalent to 125 rotations of the shaft for the gate movement shown in fig.6, see (column 10, lines 60-66)
- Detecting a first passpoint event (fig.7, detecting an event such as gate G moving from an open position to a coasting position using Hall effect sensors 57 (fig.3, fig.4, column 10, lines 16-20, lines 24-25)
- Correlating (movement of gate [A] in fig.1 is linked to the counts generated (column 10, lines 54-55)) a first value of the count (fig.7, first count value of 485) with the first passpoint event (a first event such as a gate G moving from an opened position to a coasting position (fig.7, column 11, lines 6-9)

- Defining a first count zone to include a portion, but not all, of the count as corresponds to movement of the object towards the position (a gate G moving from an opened position (count value 0) to a coasting position equivalent to a count value of 485 counts out of the 500 counts available (fig.7, column 11, lines 6-12) and the first passpoint event (a first event such as gate G moving from a fully opened position to a coasting position (fig.7, column 11, lines 6-9).

In regard to claim 9, Richmond et al. teach a method wherein the first passpoint event (see explanation in claim 8) is one of multiple passpoint events (fig.6, events such as movement of gate G from a fully closed position to a fully opened position (column 10, lines 66-67), movement of gate G from a fully opened position to a fully closed position (column 10, lines 60-62) and gate G moving to a coasting position in fig.7, (column 11, lines 6-9)).

In regard to claim 10, (see explanation in claim 8).

In regard to claim 11, (see explanation in claim 8 and 9).

In regard to claim 12, Richmond et al. teach a method wherein processing a count comprises processing a count of revolutions that correspond to movement of the object (column 10, lines 60-66).

In regard to claim 13, Richmond et al. teach a method wherein processing a count comprises at least one of, incrementing a count and decrementing a count (fig.10, column 12, lines 41-46).

In regard to claim 14, Richmond et al. teach a method wherein correlating a first value of the count (first count value of 485, column 11, lines 6-12) with the first passpoint event (a first event such as a gate G moving from a fully opened position to a coasting position as shown in fig.7, column 11, lines 8-9) comprises correlating a value of the count (movement of gate is linked to the counts generated such as a count value of 485 in fig.7, (column 10, lines 54-55)) that is substantially coincident in time to detection of the passpoint event with the first pass point event (sensors 57 in fig.3 detect passpoint events shown in figs 6-9, see column 6, lines 34-43 and (column 14, lines 17-25)).

In regard to claims 15, Richmond et al. teach a method wherein defining a first count zone further comprises defining the first count zone (a first count zone consists of a first event such as a gate G moving from a fully opened position to a coasting position at a count value of 485 as shown in fig.7, column 11, lines 6-12) to not include another passpoint event (Only one event occurs at a time such as a gate G moving from a closed position to an opened position or gate G moving from a closed position to a coasting position, column 11, lines 24-39).

In regard to claim 16, Richmond et al. teach a method wherein defining a first count zone (see explanation in claim 15) further comprises defining the first count zone to extend no further than halfway to a next adjacent pass point depends only on how the counts are set or programmed in the control unit 64 (fig.10, column 11, lines 9-13).

In regard to claim 17, Richmond et al. teach a method comprising:

- Detecting (sensors 57, column 10, lines 16-20, lines 24-25, fig.3 & fig.4) a subsequent passpoint event such as gate G moving from a coasting position to another coasting position (fig.8, column 11, lines 30-31)
- Correlating (movement of gate [A] in fig.1 is linked to the counts generated (column 10, lines 54-55)) a subsequent value of the count (fig.8, count value 485) with the subsequent passpoint event (see explanation above)
- Defining a subsequent count zone to include a portion, but not all, of the count as corresponds to movement of the object towards the position and the subsequent passpoint event (fig.8, gate G moving from a coasting position at a count value of 485 counts to another coasting position equivalent to 497 counts out of the 500 counts available for gate G to reach the fully closed position).

In regard to claim 18, (see explanation for claim 15).

In regard to claim 19, Richmond et al. teach a method wherein defining a subsequent count zone further comprises defining the subsequent count zone to not overlap with the first count zone (A first count zone is where gate G moving from an opened position (count value 0) to a coasting position (count value of 485 counts) (fig.7, column 11, lines 6-12). A subsequent count zone is where gate G moving from a coasting position equivalent to a count value of 485 counts to another coasting position equivalent to a count value of 497 counts (fig.8, column 11, lines 30-34). Therefore the range for the first count zone (0 to 485) does not overlap with subsequent count zone (485-497)).

In regard to claim 20, Richmond et al. teach a method comprising:

- Detecting (sensors 57, column 10, lines 16-20, lines 24-25, fig.3 & fig.4) a first subsequent passpoint event such as gate G moving from a coasting position to another coasting position where gate G is shy of fully closed position by few counts (fig.8, column 11, lines 30-34)
- Detecting a last passpoint event such as gate G moving from a coasting position to a fully closed position as in fig.9, that is subsequent to the first subsequent passpoint event (see explanation above)
- Defining a last count zone to include a portion, but not all, of the count as corresponds to movement of the object towards the position and the last passpoint event (A last count zone is where gate G moving from a coasting position (count value of 497) to a fully closed position (count value of 500)).

In regard to claim 21, Richmond et al. teach a method comprising defining an intervening count zone to include a portion, but not all, of the count as corresponds to movement of the object towards the position and the first subsequent passpoint event (An intervening count zone is where gate G moving from a coasting position equivalent to a count value of 485 counts to another coasting position equivalent to a count value of 497 counts and the intervening zone includes a first subsequent passpoint event where gate G moving from a coasting position to another coasting position when gate G is shy of fully closed position by few counts (fig.8, column 11, lines 30-34)).

In regard to claim 22, Richmond et al. teach a method wherein no portion of the first count zone, the last count zone and the intervening count zone overlap with one

another (A first count zone is where gate G moving from an opened position (count value 0) to a coasting position (count value of 485 counts) (fig.7, column 11, lines 6-12). A last count zone is where gate G moving from a coasting position equivalent to a count value of 497 counts to a fully closed position equivalent to a count value of 500 counts. An intervening count zone is where gate G moving from a coasting position equivalent to a count value of 485 counts to another coasting position equivalent to a count value of 497 counts. Therefore a portion of the first count zone (0 to 485 counts) does not overlap with an intervening count zone (485 to 497 counts), which does not overlap with the last count zone (497 to 500 counts)).

In regard to claim 23, a method of claim 20 further comprising not defining a count zone that includes the first subsequent passpoint event is rejected because it has a negative limitation (not defining a count zone) and claim 20 teach a positive limitation (defining a count zone).

In regard to claim 24 Richmond et al. teach a method comprising:

Subsequently calibrating a determined position for the object with respect to a passpoint event that occurs during the first count zone (Richmond et al. teaches that the control unit 64 of the gate operator [A] during automatic calibration (column 12, lines 39-40) assigns a count value that represent movement of gate G to a particular position such as a first count zone consisting of a passpoint event, such as gate G moving from a fully opened position equivalent to a count value 0 to a coasting position equivalent to a count value of 485 counts. Therefore, the control unit 64 in the gate operator [A] during automatic calibration sets a determined position by accessing a predetermined number

of counts from the memory 62 so that the gate can move to a desired position (fig.10, column 12, lines 1-8)).

In regard to claim 28, Richmond et al. teach a method using fig.10 wherein taking a first predetermined action (controller 64 takes a predetermined action such as measuring the position of the gate, see abstract & microprocessor adds predetermined control counts, column 11, lines 58-67, column 12, lines 1-8) includes initiating a self healing mode of recorrelating the passpoint and the position (such as automatically readjusting, automatically compensates (abstract), (control initiate a new measurement, column 14, lines 4-6, lines 12-22).

In regard to claim 29,the limitation for the base claim is explained in the rejection of claim 20 and claim 24.

In regard to claim 41, Richmond et al. disclose in fig.10, a movable barrier controller 64 comprising:

- A movable barrier movement sensor input 57 (fig.3, Hall effect sensor, column 10, lines 24-26)

- A counter 86 (fig.10, column 10, lines 29-31,54-55, 60-66) that is responsive to indicia of movable barrier movement as received via the movable barrier movement sensor input 57 (A counter 86 generates counts (column 10,lines 54-55), which represent movement of the gate [G] in fig.1 and is sensed by a Hall effect sensors 57 in fig.3 (column 14, lines 24-25) which are connected to a shaft and each rotation of the shaft would constitute four counts (column 10, lines 64-66);

- A passpoint signal generator 84 that is responsive (generates counts, column 10, line 55) to indicia of movement of the movable barrier (gate G, fig.1).

- Position determination means 64 (a microprocessor control unit, fig.10) that is responsive to the counter 86 and the passpoint signal generator 84 (column 10, lines 42-55, column 14, lines 16-22) for automatically processing position information (see abstract, column 12, lines 39-46 and column 14, lines 4-6) as corresponds to a movable barrier (gate G, fig.1) as a function of a passpoint event (fig.6 shows a passpoint event such as gate G moving from an opened position to a closed position, column 10, lines 60-63) that occurs during a predetermined zone of count values (column 11, lines 58-67, column 12, lines1-4 and column 14, lines 12-15).

In regard to claim 42, Richmond et al. shows in fig.10 a movable barrier controller 64, wherein the predetermined zone of count values comprises a zone that includes a plurality of consecutive count events (For example as in fig.7, a gate G moving from a fully opened position at a count value 0 to a coasting position equivalent to a count value of 485 counts is one event, gate G moving from a coasting position at a count value of 485 counts to another coasting position equivalent to a count value of 497 counts is another consecutive event (see fig.8) and therefore both events constitute a plurality of consecutive count events).

In regard to claim 43, Richmond et al. disclose in fig.10 a movable barrier controller, wherein the predetermined zone of count values comprises a zone that includes only a single passpoint event (For example, as in fig.7, a gate G moving from a fully opened position at a count value 0 to a coasting position equivalent to a count

value of 485 counts is a zone that has only one single passpoint event such as a gate G moving from a fully opened position to a coasting position and the range of count values for the zone is from 0 to 485 counts out of the 500 counts available).

In regard to claim 44, Richmond et al. disclose in fig.10 a movable barrier controller 64 wherein the passpoint signal generator 84 generates a plurality of passpoint events (events shown in figs 6-9) during movement of the movable barrier (gate G, fig.1) and wherein the predetermined zone of count values comprises a zone having a range (range of 0 to 485 counts) that can only possibly contain a single one of the passpoint events (For example, as in fig.7, a gate G moving from a fully opened position at a count value 0 to a coasting position equivalent to a count value of 485 counts is a zone that has only one single passpoint event such as a gate G moving from a fully opened position to a coasting position).

Claims Allowed

1. Claims 31-40 is allowed.

2. Claims 25,26,27 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The following is an examiner's statement of reasons for allowance:

In regard to claim 31, the prior art of records fail to show a method for use with a movable barrier operator comprising during a learning mode of operation comprising: Maintaining a count that corresponds to the movement of the movable barrier towards the predetermined position

4. Applicant's arguments, see Remarks, filed on June 26, 2007 with respect to claims 23,25-27,30-40 have been fully considered and are persuasive. The rejection and objections of claims 25, 30 and 38 has been withdrawn.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antony M. Paul whose telephone number is (571) 270-1608. The examiner can normally be reached on Mon - Fri, 7:30 to 5, Alt. Fri, East. Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AP AP 8/10/2007

LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER